

## **REMARKS**

Applicant has reviewed the Office Action mailed December 12, 2006. Claims 1 through 16 are pending in the application. Applicant hereby requests further examination and reconsideration of the application in view of the following remarks.

Applicant hereby states that no new matter is being added by the Amendment of claims 1, 5, 6, 10, 11, and 16. The amendment to claim 1 is to provide more clarity to the claim and obviate the examiner's antecedent basis rejections. The amendment to claims 5 and 6 are to establish appropriate dependency of those two claims. The amendment of claim 10 is merely a grammatical error correction as pointed out by the examiner and it does not require any additional substantive evaluation by the examiner. Further, the amendments made to 6, 11, and 16 are in response to the examiner's antecedent basis rejections, do not require further substantive examination and place the application in better condition for allowance.

### ***Claim Rejection – 35 U.S.C. §101***

The examiner rejected claims 1-11 as failing to meet the subject matter requirement under 35 U.S.C. § 101 as failing "to provide an additional tangible step with the combined mail item image." Applicant respectfully traverses this rejection.

Statutory subject matter, under 35 U.S.C. § 101, includes machines, manufactures, processes or compositions of matter that produce a useful, concrete and tangible result. The Supreme Court of the United States, in *Diamond v. Diehr*, 450 U.S. 175; 101 S.Ct. 1048; 67 L. Ed. 2d 155; 209 U.S.P.Q. 1 (U.S. 1981), stated that "[a] process is a mode of treatment of certain materials to produce a given result. It is an act, or a series of acts, performed upon the subject matter to be *transformed* and reduced to a *different state or thing*. If new and useful, it is just as patentable as is a piece of machinery." *Id.* at 183, 101 S.Ct. at 1055, 67 L. Ed. 2d at 164, 209 U.S.P.Q. at 6 (emphasis added) (quoting *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876)).

The standard for patentability of a process, as stated *Diehr*, only requires that the new and non-obvious process transform subject matter to a different "state or thing." Once that standard is met the claimed process is patentable subject matter. What the

different “state or thing” is does not remove the process from being statutory subject matter. Nor does the standard require that additional steps be provided for utilizing the matter in that different “state or thing” created by the process. For example, in *Diehr*, the process utilized the Arrhenius equation in order to determine the appropriate time to open a press in the process of curing rubber. *Id.* at 178, 101 S.Ct. at 1053, 67 L. Ed. 2d at 161, 209 U.S.P.Q. at 1. The Court determined that the transformation of rubber into a different state or thing could not be disputed. In the present case, the fact that envelopes and their contents are being transformed to digital images cannot be disputed, as the examiner recognized that the process “create[s] a combined mail item image for each said mail item . . . .” *Office Action*, at 4 (emphasis added). Such a transformation is sufficient to meet the *Diehr* standard. Applicant, therefore, disagrees with the examiner that an additional tangible step is required.

More recently, the Court of Appeals for the Federal Circuit has reiterated this principle. In *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368, 47 U.S.P.Q.2d 1596 (Fed. Cir. 1998), the court while rejecting the Freeman-Walter-Abele analysis previously utilized in evaluating process claims, held that “transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, . . . produces ‘a useful, concrete and tangible result’—a final share price momentarily fixed for recording and reporting purposes . . . .” *Id.* at 1373, 47 U.S.P.Q.2d at 1601. Similarly, in *AT&T Corp. v. Excel Communications Inc.*, 172 F.3d 1352, 50 U.S.P.Q.2d 1447 (Fed. Cir. 1999), AT&T claimed a process that utilized subscribers’ and call recipients’ Primary Interexchange Carrier (PICs) indicators as data to create a signal useful for billing purposes. The claim read:

A method for use in a telecommunications system in which interexchange calls initiated by each subscriber are automatically routed over the facilities of a particular one of a plurality of interexchange carriers associated with that subscriber, said method comprising the steps of:

generating a message record for an interexchange call between an originating subscriber and a terminating subscriber, and including, in said message record, a primary interexchange carrier (PIC) indicator having a value which is a function of whether or not the interexchange carrier

associated with said terminating subscriber is a predetermined one of said interexchange carriers.

*Id.* at 1354, 50 U.S.P.Q.2d at 1449. The claim only mentioned the generation of a message record. It did not mention any further steps to be taken with the message. The court determined that “The PIC indicator . . . [is] a useful, non-abstract result . . . . Because the claimed process applies the Boolean principle to produce a useful, concrete, tangible result without pre-empting other uses of the mathematical principle, on its face the claimed process comfortably falls within the scope of Section 101.” *Id.* at 1358, 50 U.S.P.Q.2d at 1452. Although based on the use of mathematical formulas, *AT&T* clearly indicates that it is not what you do with the result of the process that makes it patentable subject matter; it is the fact that the process transforms matter into a different useful form that comes within the purview of Section 101. Under the examiner’s reasoning, the claim presented in *AT&T* would have failed to meet the statutory subject matter requirement because it did not state any additional steps for the use of the message record generated by the process. In applicant’s case, the conversion of physical objects (envelopes and their contents) into digital images is similar to the transformation of data into share prices in *Street Bank* and into PIC codes in *AT&T*.

Furthermore, once the applicant has shown that there is a transformation of matter, the process is deemed to be statutory subject matter. As explained in section 2106.IV.C2 (b) of the MPEP:

**(1) Practical Application by Physical Transformation**

USPTO personnel first shall review the claim and determine if it provides a transformation or reduction of an article to a different state or thing. If USPTO personnel find such a transformation or reduction, USPTO personnel shall end the inquiry and find that the claim meets the statutory requirement of 35 U.S.C. 101. If USPTO personnel do not find such a transformation or reduction, they must determine whether the claimed invention produces a useful, concrete, and tangible result.

As explained previously, the present invention converts physical envelopes and their contents into digital images maintaining the integrity of the envelope and its corresponding contents. As a result, a physical transformation has occurred and the process is statutory subject matter.

The transformation of “matter” into a different “state or thing” does not require a tactile output. In *Arrhythmia Research Technology Inc. v. Corazonix Corp.*, 958 F.2d 1053, 22 U.S.P.Q.2d 1033 (Fed. Cir. 1992), the Court of Appeals for the Federal Circuit held that the process of converting an analog signal to a digital signal related to a patient’s heart activity met the requirements of § 101. *Id.* at 1059-60, 22 U.S.P.Q.2d 1038. The first claim in that case stated:

A method for analyzing electrocardiograph signals to determine the presence or absence of a predetermined level of high frequency energy in the late QRS signal, comprising the steps of:

converting a series of QRS signals to time segments, each segment having a digital value equivalent to the analog value of said signals at said time;

applying a portion of said time segments in reverse time order to high pass filter means;

determining an arithmetic value of the amplitude of the output of said filter; and

comparing said value with said predetermined level.

*Id.* at 1055, 22 U.S.P.Q.2d 1035. While the court was analyzing the use of mathematical formulas to conduct the transformation, it is important to note that the claim does not provide an additional tangible step other than comparing the signals with a predetermined level. While both *Diehr* and *Arrhythmia* addressed the utilization of mathematical formulas within their respective processes, they underscore the basic principle that the process itself is patentable subject matter. In applicant’s case, like in *Arrhythmia*, there is a transformation of matter from one state to another. In *Arrhythmia*, it was the transformation of non-tactile analog signals into non-tactile digital signals. In applicant’s case, it is the transformation of physical objects (envelopes and their contents) into non-tactile digital images. As a result, applicant’s invention meets the requirements of 35 U.S.C. 101 and applicant respectfully requests that this rejection be withdrawn.

#### ***Claim Rejections – 35 USC § 112***

The examiner rejected claims 2, 4, 6, and 11-16 under 35 U.S.C. 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As presented in the Listing of Claims, Applicant has amended the claims to comply with this requirement.

Claim 2 recites the limitation “said envelope images” and “said contents pages images” in line 17. Examiner rejected the claim for lacking antecedent basis as Claim 1, line 19, stated “images of the envelopes” not “envelope images” and claim 1, line 11, stated “images of the content pages” not “content pages images. Claim 1 has been amended to state “envelope images” and “content pages images” therefore obviating the rejection and placing claim 2 in better condition for allowance.

Claim 4 recites the limitation “said envelope images” and “said contents pages images” in line 17. Examiner rejected the claim for lacking antecedent basis as Claim 1, line 19, stated “images of the envelopes” not “envelope images” and claim 1, line 11, stated “images of the content pages” not “content pages images. Claim 1 has been amended to state “envelope images” and “content pages images” therefore obviating the rejection and placing claim 4 in better condition for allowance.

Claim 6 recited the limitation “images” in lines 16-17. Examiner rejected the claim for lacking antecedent basis as Claim 4, line 6, stated “said envelope images and said contents pages images.” Claim 6 has been amended to state “said envelope images and said contents pages images” obviating the rejection and placing claim 6 in better condition for allowance.

Claim 11 recited the limitation “said mail article” in line 17. Examiner rejected the claim for lacking antecedent basis as claim 1 states “mail item” not “mail article.” Claim 11 has been amended to state “mail item,” obviating the rejection and placing claim 11 in better condition for allowance.

Claim 12 recited the limitation “said envelope images” and “said contents pages images” in line 9. Examiner rejected the claim for lacking antecedent basis as Claim 12, pg. 18 line 4, stated “images of the envelopes” not “envelope images” and claim 12, pg 18 line 7, stated “images of the content pages” not “content pages images.” Claim 12 has been amended to state “envelope images” and “content pages images” therefore obviating the rejection and placing claim 12 in better condition for allowance.

Claim 15 recites the limitation “said envelope images” and “said contents pages images” in line 9. Examiner rejected the claim for lacking antecedent basis as Claim 12, pg. 18 line 4, stated “images of the envelopes” not “envelope images” and claim 12, pg

18 line 7, stated "images of the content pages" not "content pages images." Claim 12 has been amended to state "envelope images" and "content pages images" therefore obviating the rejection and placing claim 15 in better condition for allowance.

Claim 16 recited the limitation "said mail article" in line 2. Examiner rejected the claim for lacking antecedent basis as claim 12 states "mail item" not "mail article." Claim 16 has been amended to state "mail item," obviating the rejection and placing claim 16 in better condition for allowance.

Applicant wish to bring to the attention of the examiner that although claims 11-16 were rejected under 35 U.S.C. § 112 for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, the examiner did not provide any particular grounds for rejection of claims 13 and 14. Applicant understands these two claims to be in proper form and in condition for allowance.

***Examiner's Comments***

Applicant thanks the examiner for his statements in regards to the fact that the prior art neither anticipates nor does it reasonably teach the invention disclosed in the application. Applicant believes that the present response and amendments place the application in condition for allowance.

**CONCLUSION**

In light of the foregoing, reconsideration and allowance of the claims is earnestly solicited. Accordingly, notification to that effect is earnestly requested. In the event that issues arise in the application which may readily be resolved via telephone, the Examiner is kindly invited to telephone the prosecuting attorney, identified below, at (410) 659-6428 to facilitate prosecution of the application.

Respectfully submitted,

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